Basics 9: How to Use the Pen Tool

The **Pen Tool** is used to draw shapes, lines, and curves. In our opinion, this is the most important tool you should become familiar with.
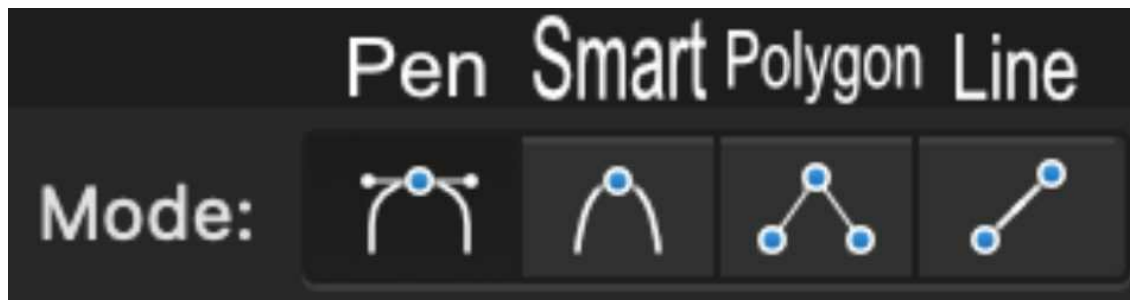
Shortcut: *Press* **P** to *select* this tool.

Before we start, let's create a New Document with these specifics:

- **Web - CD Cover Digital Release**
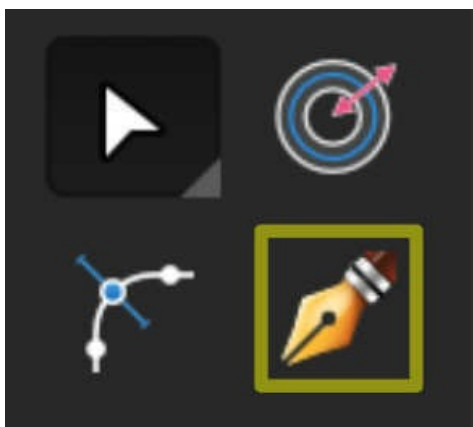- **Transparent Background** (*unchecked*)

With the Pen Tool activated, look at the left side of its Contextual Toolbar and you'll see that the Pen Tool has four Modes you can choose from to make specific kinds of lines. We think it's very important that you know these Modes, so we'll show you what each does. The Node Tool, which can be thought of as a sibling tool to the Pen Tool, works much the same way.

Simplistically, you can get a sense of what each Mode does by looking at its thumbnail. The first has a Bézier line, the second is a curved line, the third is made up of two straight lines, and the fourth looks like a single straight line.

We'll explain and show you how to use each below. As you are going through this lesson, please take some time and create your own lines to get a feel of how these lines work on your screen. When you're done creating a shape, click on the Node Tool (see darkened tool in the below image) and click & drag on the line's nodes to change the look of your drawn lines.
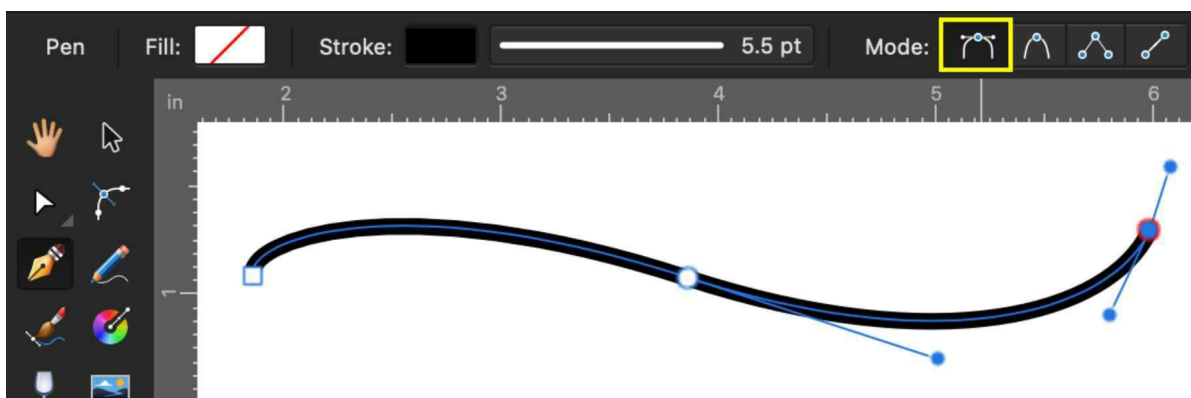
Note: The Pen Tool is the icon with the yellow square around it in the below image).

Let's discuss these modes...

The first Mode is the **Pen Mode**. this is used to create precise Bézier lines, shapes and curves. A Bézier curve is a line (or path) used to create vector graphics and is made up of two or more control nodes which control the size and shape of the drawn line (see the image below and notice the different square and circular nodes on the line).
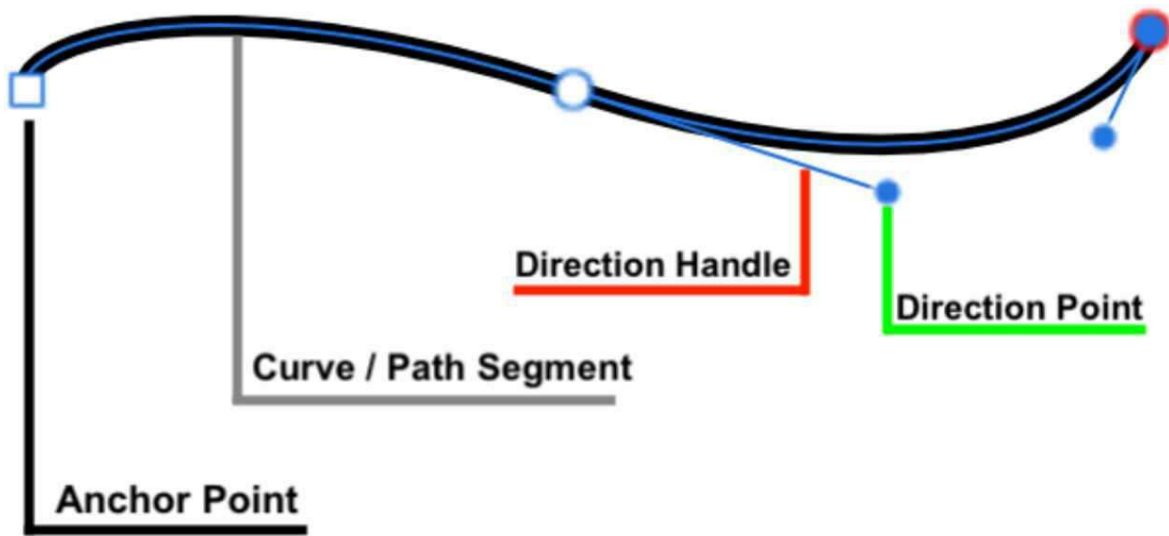
In the below image, we made a simple flowing line using the Pen Mode (see yellow rectangle). This Pen Mode is the mode we use probably 95% of the time when we work in Affinity Designer.
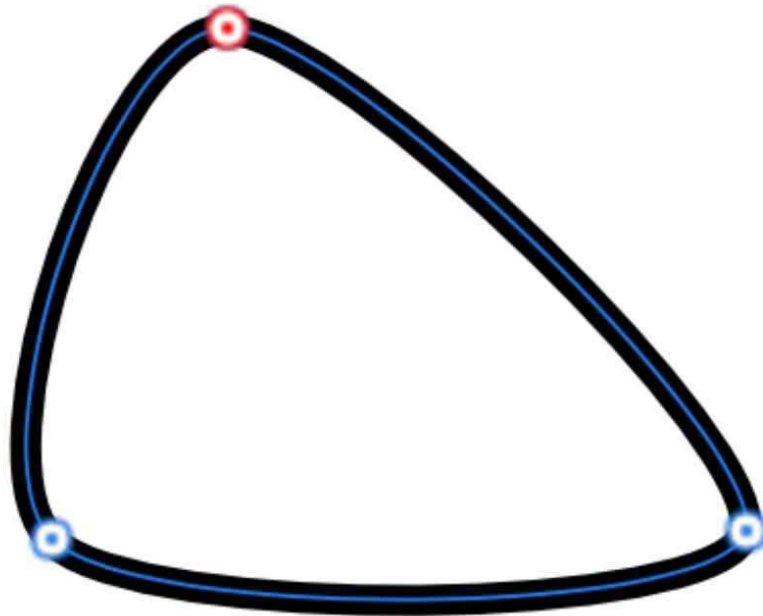

We're done now explaining what the first Pen Mode is. But, before we move on to the next Mode, we think it's important for you to know the different parts of the Pen line.

As we continue in this book, we may say something like - "when you move the directional handle you can increase the curve of the path segment". This language is confusing to new users. So, we how we can explain visually what we mean by the below graphic we created for you. Remember that 'path' and

'line' are the same.

Direction Handle

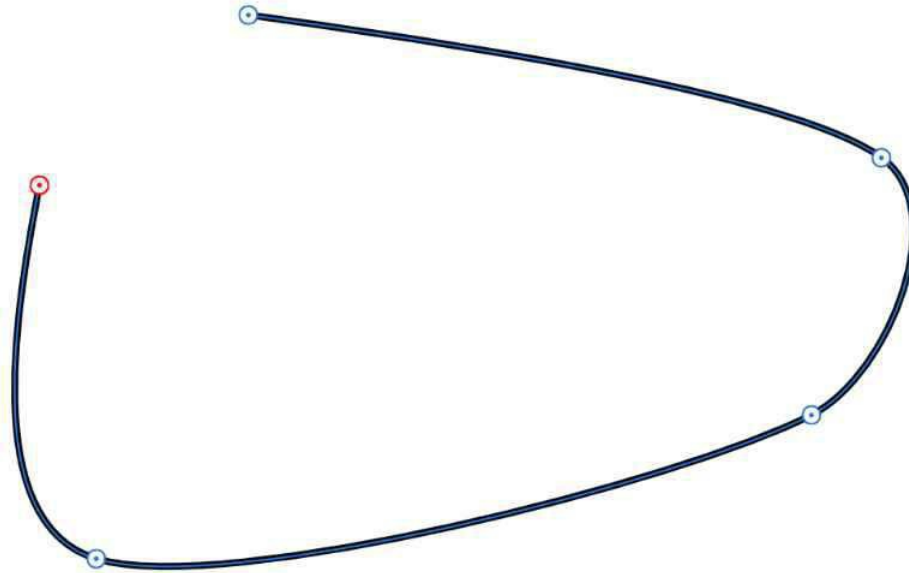**Direction Point**

Curve / Path Segment

Anchor Point

The second Mode is the **Smart Pen Mode** (see the yellow rectangle in the below image) This Mode creates curved lines between anchor points. So, when you click out three points in the shape of a triangle, you won't get three straight lines, but three curved lines (see the below image).

Practice: Take your time and create five new shapes. Learn to see how the shapes look and feel as you create them. Notice how one of the nodes is red and not blue. Can you think of why this is so? This means it's the ending node you clicked on to close your shape.
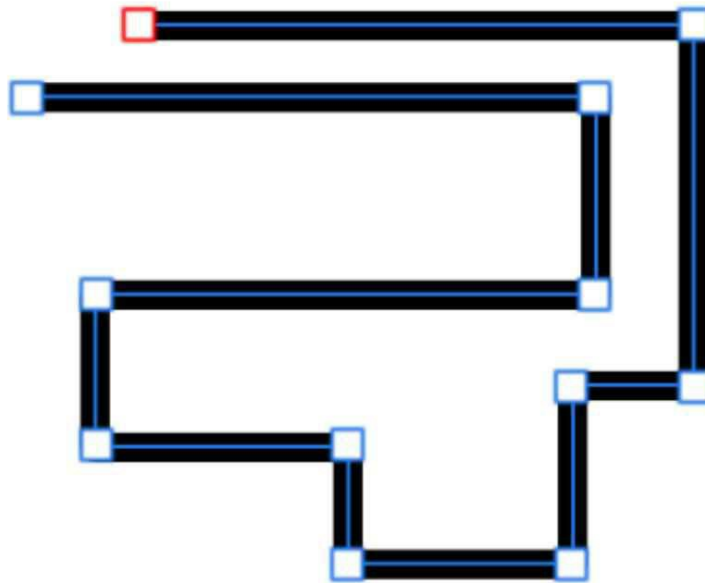
Check out this shape below. Notice that we didn't close our shape and notice where the red node is located. If the image is a bit unclear, the red node is the left-most node.

That's all we are going to talk about with this node. Let's now look at the third Pen Mode option.

The third Mode is the **Polygon Pen Mode**. This is the mode you want to use when you want to only make precisely straight lines (see the below image).
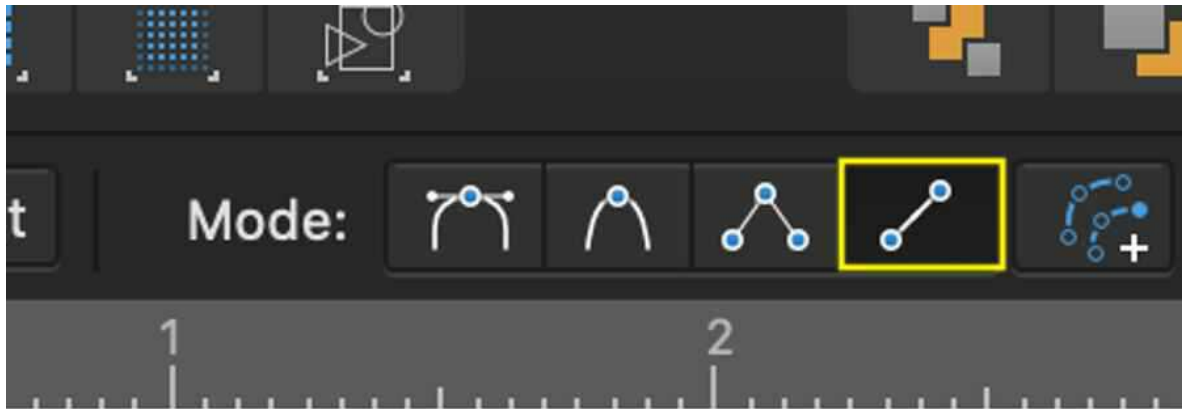
Open Question: For what purposes do you suppose someone might want to use the Polygon Pen Mode? Which kind of graphics would that person be most interested?

Note: Affinity Designer makes making perfectly straight lines simple. Just hold-down the Shift key when making a straight line and the line will be perfect. While holding-down the Shift key, you can also rotate the line to 15°, 30°, 45°, etc. lines. It is a very handy trick.

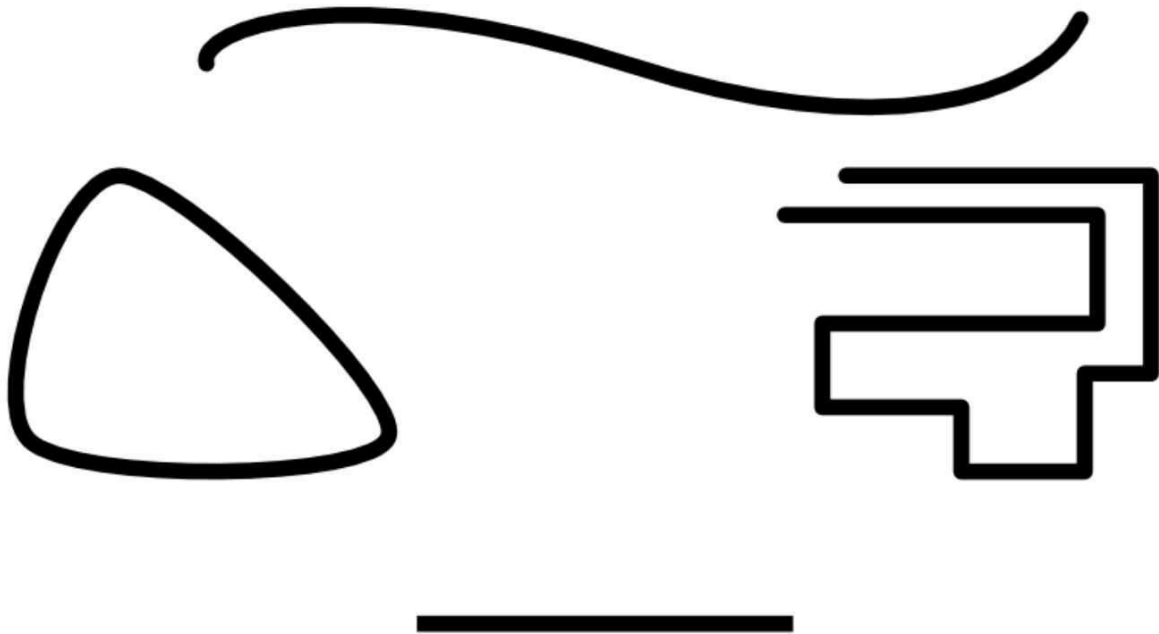That's all we have on the Polygon Pen Mode.

The fourth Mode is the **Line Mode**. It is used for making single line segments. When using this Mode, you cannot add a curve to the path segment. It just creates a line. There are no nodes in between the starting and ending nodes.
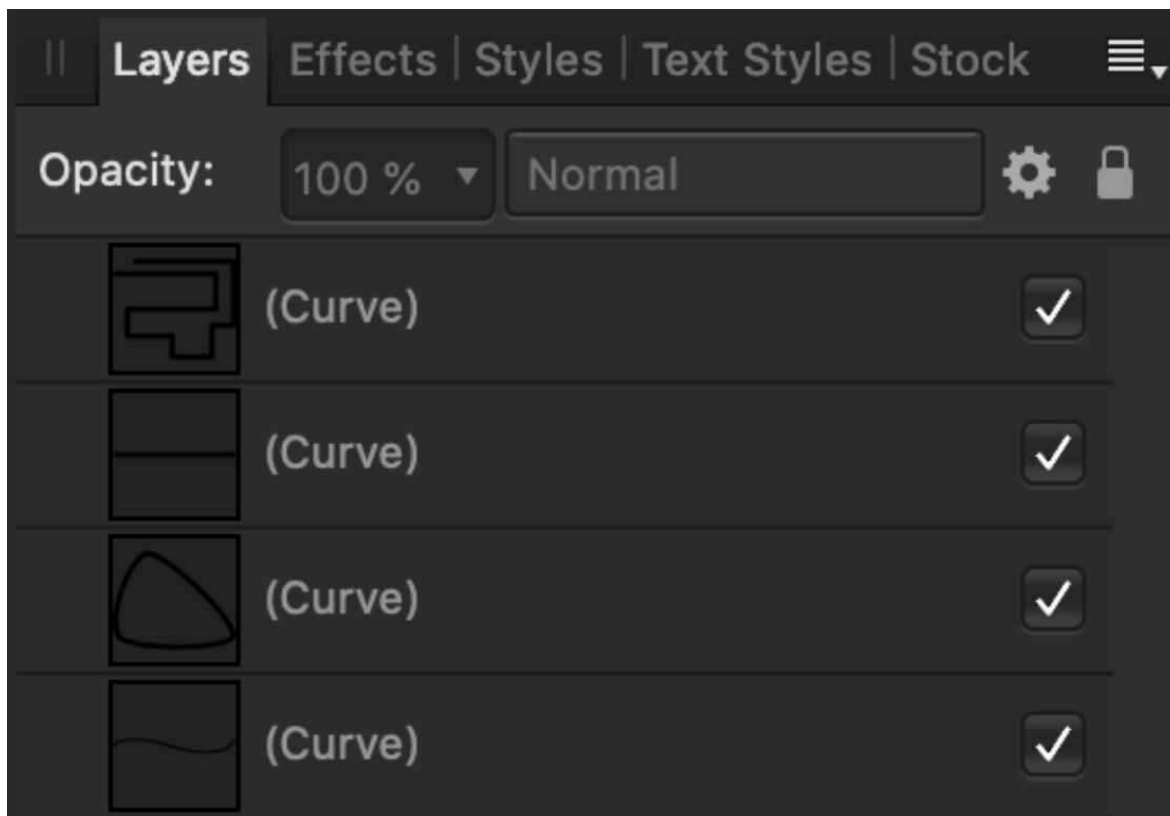
Sweet & simple.

Practice: Create five lines using this mode. Try to make them horizontal and vertical. Use the Shift key when creating two of these lines and experience the difference between using and not using the Shift key.

Done. That's it with the four Pen Modes. In the below image, we have all four types of lines in one document. No, we did not intend to a cool face with them :)

Remember that when you create these different lines, each line will make up its own layer in the Layers Panel. This is perfect because it makes it very easy to make changes to each individual line. If one is above the other, then you can change their positions in the Layers Panel and then change how they look on your document.

Finished. This ends this lesson on the Pen Tool.